

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

| | |
|------------------------------------------------------------------------------|------------------------------------------------------------------|
| Date of mailing (day/month/year) 08 February 2001 (08.02.01) | |
| International application No. PCT/GB00/01989 | Applicant's or agent's file reference BR/ES/P01PCT |
| International filing date (day/month/year) 01 June 2000 (01.06.00) | Priority date (day/month/year) 01 June 1999 (01.06.99) |
| Applicant SWEENEY, Edward | |

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
 28 December 2000 (28.12.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

| | |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35 | Authorized officer Zakaria EL KHODARY Telephone No.: (41-22) 338.83.38 |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Applicant's or agent's file reference BR/ES/P01PCT | FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. | |
| International application No. PCT/GB 00/ 01989 | International filing date (day/month/year) 01/06/2000 | (Earliest) Priority Date (day/month/year) 01/06/1999 |
| Applicant SWEENEY, Edward | | |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawing to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/01989

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A47L4/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A47L D06F B08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|------------------------------------------------------------------------------------|-----------------------|
| A | DE 44 03 518 A (FORON WASCHGERÄTE GMBH) 10 August 1995 (1995-08-10) | |
| A | DE 196 46 340 A (S. KRIEG ET AL.) 14 May 1998 (1998-05-14) | |
| A | EP 0 331 542 A (THE PROCTER & GAMBLE COMPANY) 6 September 1989 (1989-09-06) | |
| A | DE 88 01 528 U (ROBERT FINKE KG) 17 March 1988 (1988-03-17) | |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 September 2000

Date of mailing of the international search report

06/10/2000

Name and mailing address of the ISA

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Bourseau, A-M

INTERNATIONAL SEARCH REPORT

Information on patent family members

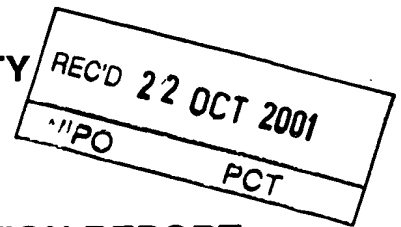
International Application No

PCT/GB 00/01989

| Patent document cited in search report | | Publication date | Patent family member(s) | | Publication date |
|-------------------------------------------|---|---------------------|----------------------------|-----------|---------------------|
| DE 4403518 | A | 10-08-1995 | NONE | | |
| DE 19646340 | A | 14-05-1998 | NONE | | |
| EP 0331542 | A | 06-09-1989 | FR | 2626589 A | 04-08-1989 |
| | | | FR | 2627198 A | 18-08-1989 |
| | | | FR | 2626590 A | 04-08-1989 |
| | | | FR | 2632052 A | 01-12-1989 |
| | | | BR | 8900544 A | 10-10-1989 |
| | | | JP | 1287199 A | 17-11-1989 |
| | | | MX | 170830 B | 20-09-1993 |
| | | | US | 5129120 A | 14-07-1992 |
| | | | FR | 2626590 B | 29-03-1991 |
| DE 8801528 | U | 17-03-1988 | NONE | | |

PATENT COOPERATION TREATY

PCT



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| | | |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Applicant's or agent's file reference BR/ES/P01PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/GB00/01989 | International filing date (day/month/year) 01/06/2000 | Priority date (day/month/year) 01/06/1999 |
| International Patent Classification (IPC) or national classification and IPC A47L4/04 | | |
| Applicant SWEENEY, Edward | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 7 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application.

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date of submission of the demand 28/12/2000 | Date of completion of this report 18.10.2001 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized officer Korn, K-C Telephone No. +49 89 2399 2342  |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/01989

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):
Description, pages:

1-5 as originally filed

Claims, No.:

1-11 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/01989

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 11.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 11 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos. . . .

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims 1-10

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/01989

| | | | |
|-------------------------------|------|--------|------|
| | No: | Claims | |
| Inventive step (IS) | Yes: | Claims | 3-10 |
| | No: | Claims | 1, 2 |
| Industrial applicability (IA) | Yes: | Claims | 1-10 |
| | No: | Claims | |

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

Ad section III

Independent claim 11 is so unclear within the meaning of Article 6 PCT (see section VIII) that no meaningful opinion could be formed with regard to novelty or inventive step.

Ad section V

1. The following documents have been considered for the purposes of this preliminary report:
(D1) DE-A-3716989 (see column 1, line 46-column 2, line 38 and Figs.1,2)
(D2) US-A-5017239
(D3) DE-A-4403518 (see especially claims 1-3 and Fig.1)

The documents (D1) and (D2) were not cited in the international search report.

2. Each of the documents cited above relates to an apparatus for cleaning vertical window blinds of the type which include a plurality of strips of a flexible fabric material. (D1) is regarded as being the closest prior art document in respect of the subject-matter of claim 1.
3. The subject-matter of apparatus claim 1 is new in terms of the relevant state of the art (Article 33(2) PCT), since none of the available prior art documents discloses the combination of all the features set out in claim 1.
4. The subject-matter of independent claim 1 is distinguished from the washing aid known from the document (D1) (see the reference signs 2-4,7 in Figs.1,2) only in that the holder of drum shape which is known per se from the disclosure of (D1) has a perforated/slotted wall, instead of having a perforated/slotted bottom plate.
 - 4.1 However, the distinguishing feature is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed (see e.g. the slotted wall of the hollow body (3) as depicted in Fig.1 of the device known from (D3)).

- 4.2 The subject-matter of claim 1 does, therefore, not involve an inventive step in view of the combination of teaching of **(D1) and (D3)** and does not satisfy the criterion set forth in Article 33(3) PCT.

5. To provide the axial core as depicted in Fig.2 of **(D1)** as a one-piece component or a two-piece component, i.e. a male/female attachment in each part of the holder, is a result of routine design considerations in view of the teaching of **(D1)**, and as such does not contribute any inventive matter to claim 1.

Thus, the subject-matter of dependent claim 2 does not involve an inventive step (Article 33(3) PCT).

6. The combination of features of claims 1, 2 and 3 is neither known from, nor rendered obvious by, the available prior art.

The subject-matter of an independent apparatus claim drafted on the basis of the present claims 1, 2 and 3 is considered to involve an inventive step, and would, therefore, have satisfied the criterion set forth in Article 33(3) PCT.

7. Claims 4-10 which are concerned with particular embodiments of the washing aid would then have been dependent directly or indirectly on an independent apparatus claim including the features of present claims 1-3, and would, thus, also have satisfied the criterion set forth in Article 33(3) PCT.
8. It is also self evident that the subject-matter of claims 1-10 can be considered as being susceptible of industrial application within the meaning of Article 33(4) PCT.

Ad section VII

9. Independent claim 1 is not in the **two-part form** in accordance with Rule 6.3(b) PCT, which in the present case would have been appropriate, with those features known in combination from the closest prior art document **(D1)** being placed in the pre-characterising part (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

- 9.1 The applicant has not provided reasons why apparatus claim 1 should not be in the two-part form.

Neither did he clearly indicate in the description which features of the subject-matter of claim 1 are already known from the document **(D1)** (see the PCT Guidelines, PCT/GL/3 III, 2.3a).

10. The documents **(D1)**, **(D2)** and **(D3)** have not been identified in the description, nor has the relevant background art disclosed therein been briefly discussed. The requirements of Rule 5.1(a)(ii) PCT are, thus, not fulfilled.
11. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Ad section VIII

12. Independent claim 11 rely only on references to the drawings, to define the matter for which protection is sought.

According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here (see also the Guidelines PCT/GL/3 III, 4.10).

It follows that in the present case the wording of claim 11 is legally uncertain, i.e. the subject-matter to be protected is not clear.

Accordingly, independent claim 11 should have been either amended or deleted from the body of the claims.

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/72738 A1

(51) International Patent Classification⁷: A47L 4/04

(21) International Application Number: PCT/GB00/01989

(22) International Filing Date: 1 June 2000 (01.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9912648.4 1 June 1999 (01.06.1999) GB

(71) Applicant and

(72) Inventor: SWEENEY, Edward [GB/GB]; 16 Clontarf Drive, Omagh BT78 5BD, County Tyrone (GB).

(74) Agent: ROBERTSON, Robert, Bruce, Spence; 240 Upper Newtownards Road, Belfast BT4 3EU (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK,

DZ, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW.

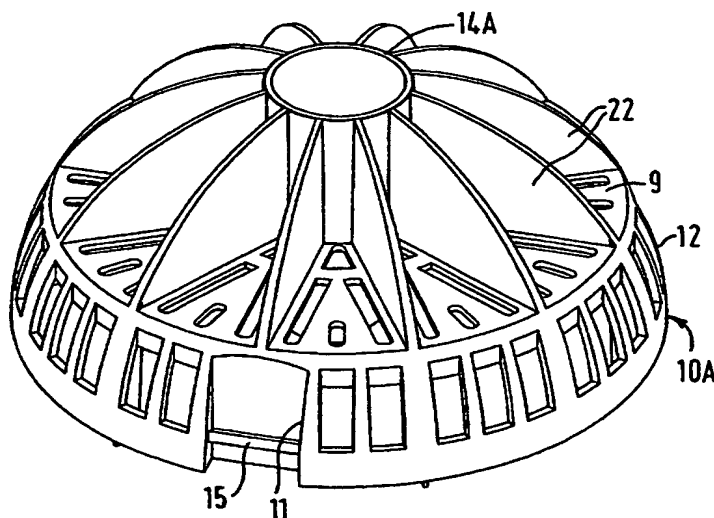
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LOUVRE BLIND WASHING AID



(57) Abstract: A washing aid for use in cleaning the flexible slats of a louvre blind comprises a slat holder (10) whose wall surround (12) is of openwork to allow passage of cleaning medium therethrough. The holder (10) internally defines a chamber of substantially drum shape whose axial length and diameter are substantially the same as a roll of slats to be accommodated therein. The holder (10) is in two parts (10A, 10B) openable to locate a roll therein and securable together to hold the roll during washing. The holder (10) has an axial core (14) in each part (10A, 10B). The core (14) is hollow and is perforated or slotted. The securing of the parts (10A, 10B) together is by two or more external fasteners (15) engaging both parts (10A, 10B).

LOUVRE BLIND WASHING AID

This invention relates to a vertical louvre blind washing aid.

5 A problem exists in the washing of flexible slats or vanes of vertical louvre blinds, the slats being made from material having similar sleeves at the top and bottom ends into which a hanger and a ballaster are respectively fitted for each slat.

Through use, such slats become dirty, or discoloured by, for example smoking, and periodically require to be cleaned. While this operation can be
10 performed by commercial laundry establishments, in most domestic locations they are cleaned by the householder. Most windows, to which a louvre blind is fitted on a rail across the top of the window, has one or two arrangements of slats. In each arrangement, the slats are connected together by their ballasters being linked by flexible connectors with the hangers being suspended on hooks provided on

15 corresponding slides on the rail and having a common cord control, whereby they can be opened, shut or angled. In the one arrangement version, the slats are opened to one side of the window, and in the two arrangement version, with normally the same number of slats in each arrangement, the slats are opened, one arrangement to each side of the window. Rather than being washed individually, the slats of each
20 arrangement are washed together. Heretofore, one of the means employed by the householder, having removed an arrangement from the rail, is to roll the arrangement of slats (after the hangers, ballasters and connectors have been removed) into a roll and, as a means of preventing axial movement of one slat relative to its neighbours, places one or more elastic bands or ties therearound before placing the roll into the
25 washing machine. While this prevents relative axial movement of the slats, it inhibits the cleaning of the slats in the washing process and is therefore a disadvantage.

An object of the present invention is to obviate or mitigate this disadvantage.

Accordingly, the present invention is a washing aid for use in cleaning the flexible slats of a louvre blind, the aid comprising a slat holder whose wall surround is

of openwork to allow passage of fluid therethrough, the holder internally defining a chamber of substantially drum shape whose axial length and diameter are substantially the same as a roll of slats to be accommodated therein, the holder being in two parts openable to locate a roll therein and securable together to hold the roll during washing.

Preferably, the holder has an axial core in each part. The core is desirably hollow and may be perforated or slotted. The securing of the parts together may be by two or more external fasteners engaging both parts. Alternatively, the top of one part of the core may have a series of protuberances to be a push fit into a corresponding series of holes in the other part. Further alternatively, the outer end of one part of the core may be formed as a socket and the other outer end as a spigot.

Preferably also, the outside of the holder is formed as a sphere or substantially so to assist in the tumbling movements of the aid when located in a washing machine. The two parts may be similar in shape, the spherical structure being formed by a plurality of quadrant shaped web plates between an extended core and a surface of the chamber.

Preferably further, a container for dispensing a cleaning medium in liquid or tablet form is provided to fit inside the axial cores, the container having an annular projecting flange to be engaged by the end faces of the cores when assembled. The container preferably has a series of slots or apertures therein to allow flow of water thereinto and medium thereout.

An embodiment of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

Fig. 1 is an exploded perspective view of two parts of a washing aid according to the present invention;

Fig. 2 is a side elevational view of the washing aid;

Fig. 3 is a cross-sectional view on line III – III of Fig. 2;

Fig. 4 is a plan view of a top part of the aid;

Fig. 5 is a cross-sectional view on the line V – V of Fig. 4;

Fig. 6 is a cross-sectional view on line VI – VI of Fig. 4; and

Fig. 7 is a perspective view of one part of the aid showing a container for

5 cleaning medium about to be located.

Referring to the drawings, a washing aid for use in cleaning flexible slats of a louvre blind comprises a slat holder 10 whose wall surround 12 is of openwork to allow passage of fluid therethrough and having a perforated/slotted bottom plate 8 and a perforated/slotted top plate 9. The holder 10 internally defines a chamber of
10 substantially drum shape whose depth and diameter are substantially the same as a roll of slats (not shown) to be accommodated therein. There are at least two standard widths for slats. The chamber is dimensioned to accommodate the larger width. An annular perforated/slotted spacer (not shown), of diameter just short of the diameter of the chamber, is provided to be used with the smaller width slats, the
15 spacer reducing the axial length of the chamber. The holder 10 is in two parts 10A, 10B openable to locate a roll therein and securable together to hold the roll during washing by use of three fasteners 13, equi-spaced around the periphery as shown. As shown, each part 10A, 10B is similarly provided with three recesses 11 in each of which, a bar 15 is provided, the axis of which lies in a plane parallel to the top and
20 bottom of the chamber. Each fastener 13 is elongate and has at one end a C-clip 15A to encompass a bar 15 of one part and near to the other end has a ledge 15B. When a fastener 13 is fitted, the ledge underlies the bar 15 of the other part as shown. The portion of the fastener 13 beyond the ledge 15B serves as a finger grip to open the fastener from its clipped position. To close the fastener 13, it is simply
25 pushed against the bar 15 of the other part and the body of the fastener 13 flexes to ride over the bar 15 and catch the bar in its closed position. Each fastener 13 is

normally held on the bar 15 of the one part and pivots thereabout but can be removed by pulling it apart from the bar 15.

The holder 10 has an axial core 14. The core 14 is hollow and perforated/slotted as shown. The outside of the holder 10 is formed as a sphere 20 or substantially so to assist in the tumbling movement of the aid when located in the washing machine. The two parts 10A, 10B are similar in shape, the spherical structure being formed by a plurality of quadrant shaped web plates 22 between an extended core 14A and the top and bottom surfaces of the chamber.

A container 24 for dispensing a cleaning medium in liquid or tablet form is provided to fit inside the axial cores 14, the container 24 having an annular projecting flange 26 to be engaged by the inner end faces of the cores 14 when assembled. The container 24 has a series of slots or apertures 28 therein to allow flow of water thereinto and cleaning medium thereout..

In a first modification (not shown), the securing of the parts 10A, 10B together is by the top of one part of the core 14 having a series of protuberances to be a push fit into a corresponding series of holes in the other part 10B. Alternatively, the core 14 is in two parts 14A, 14B provided on corresponding parts 10A, 10B, part 14B being of slightly greater depth than part 10B. The outer end of part 14A is formed as a socket and the outer end of part 14B as a spigot to fit inside and be secured in the socket end by push-fitment.

In a second modification (not shown), the core 14 is provided in one part of the holder and a hole is provided in the other part. The core 14 extends slightly more than the axial depth of the holder and at or adjacent to its outer end has one continuous protuberance to be a push fit through the hole.

In use, an arrangement of slats is formed into a roll and fitted into part 10A of the holder 10 around the core 14 and the part 10B is secured thereto. The holder is

then placed in a washing machine and with the machine energised, tumbles around inside.

The slats in the holder 10 are prevented from moving axially relative to each other but can move radially to each other thereby to allow the cleaning medium in the machine to reach all parts of the slats for cleaning the slats.

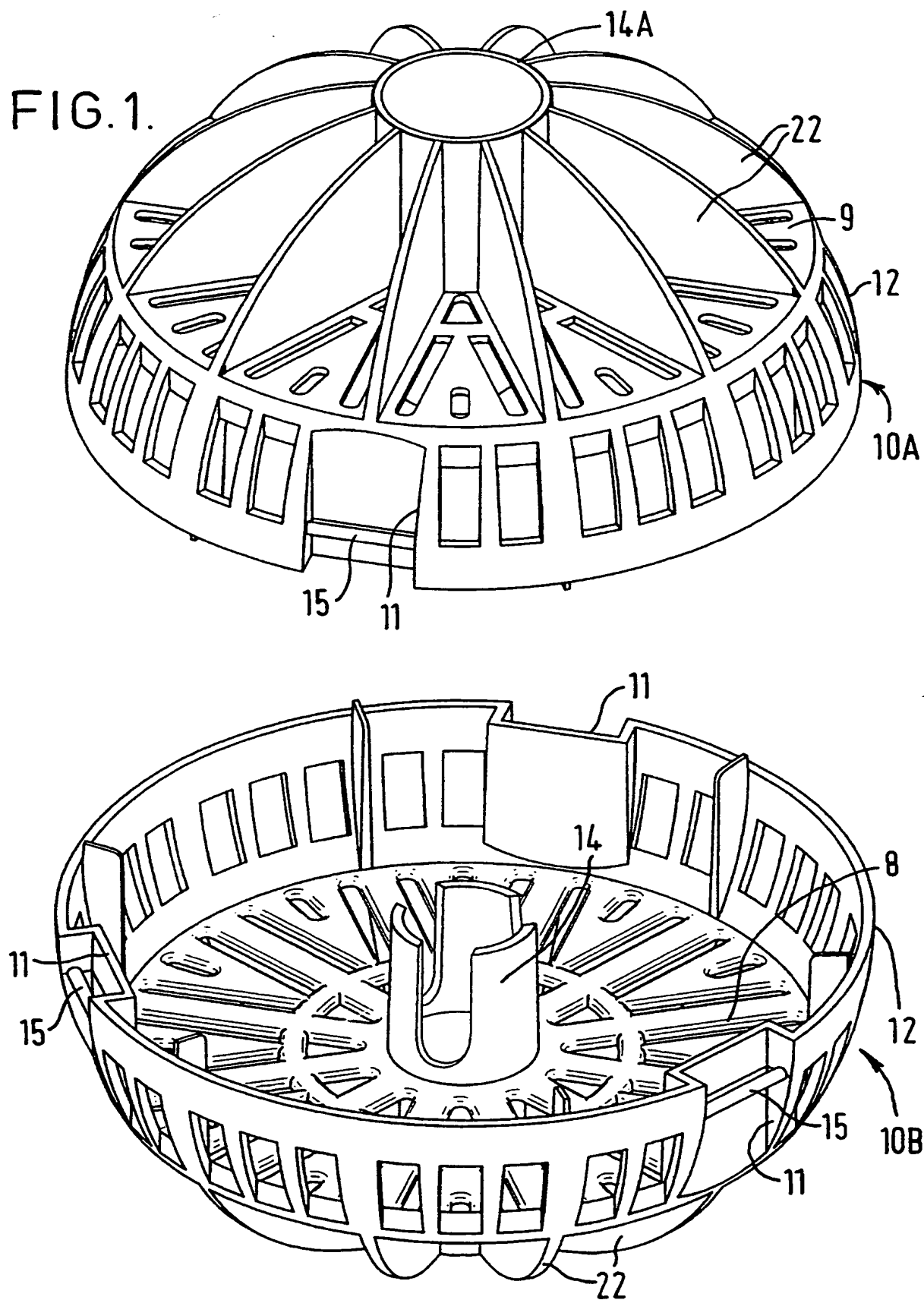
Variations and other modifications can be made without departing from the scope of the invention described above and as claimed hereinafter.

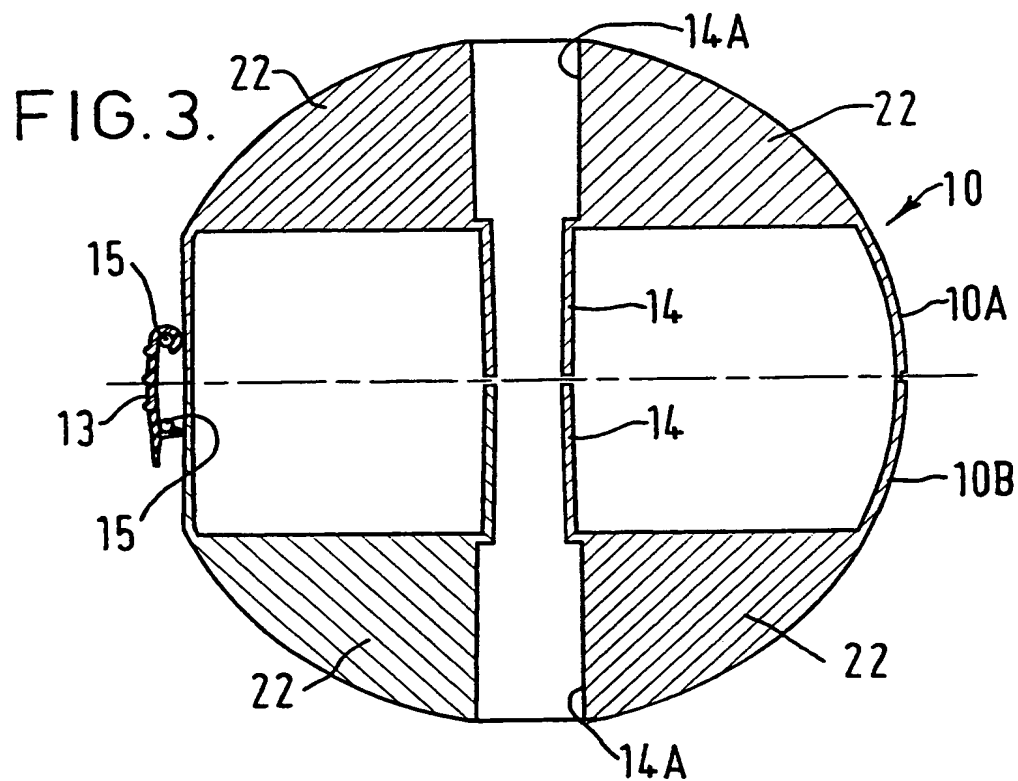
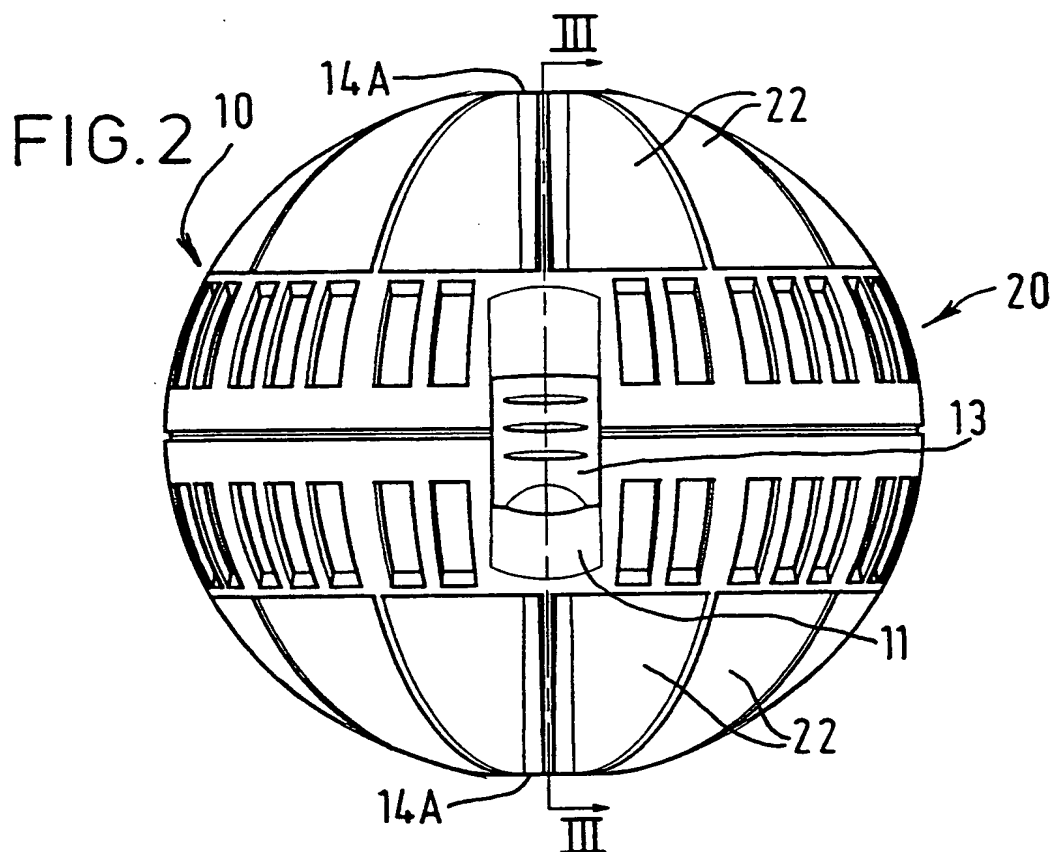
CLAIMS

1. A washing aid for use in cleaning the flexible slats of a louvre blind, the aid
5 comprising a slat holder whose wall surround is of openwork to allow passage
of fluid therethrough, the holder internally defining a chamber of substantially
drum shape whose axial length and diameter are substantially the same as a
roll of slats to be accommodated therein, the holder being in two parts
openable to locate a roll therein and securable together to hold the roll during
10 washing.
2. An aid as claimed in Claim 1, wherein the holder has an axial core in each
part.
- 15 3. An aid as claimed in Claim 1 or 2, wherein the core is hollow and is perforated
or slotted.
4. An aid as claimed in Claim 1, 2 or 3, wherein the securing of the parts
together is by two or more external fasteners engaging both parts.
20
5. An aid as claimed in any one of the preceding Claims, wherein the outside of
the holder is formed as a sphere or substantially so to assist in the tumbling
movements of the aid when located in a washing machine.
- 25 6. An aid as claimed in Claim 5, wherein the two parts are of similar shape, the
spherical structural being formed by a plurality of quadrant shaped web plates
between an extended core and a surface of the chamber.

7. An aid as claimed in any one of Claims 2 to 6, wherein a container for dispensing a cleaning medium of liquid or tablet form is provided to fit inside the axial cores, the container having an annular projective flange to be engaged by the inner end faces of the cores when assembled.
8. An aid as claimed in Claim 7, wherein the container has a series of apertures therein to allow flow of water thereinto and medium thereabout.
9. An aid as claimed in Claim 1, 2 or 3, wherein the top of one part of the core has a series of protuberances to be a push fit into a corresponding series of holes in the other part.
10. An aid as claimed in Claim 1, 2 or 3, wherein the outer end of one part of the core is formed as a socket and the other outer end as a spigot.
11. A washing aid substantially as hereinbefore described with reference to the accompanying drawings.

FIG. 1.





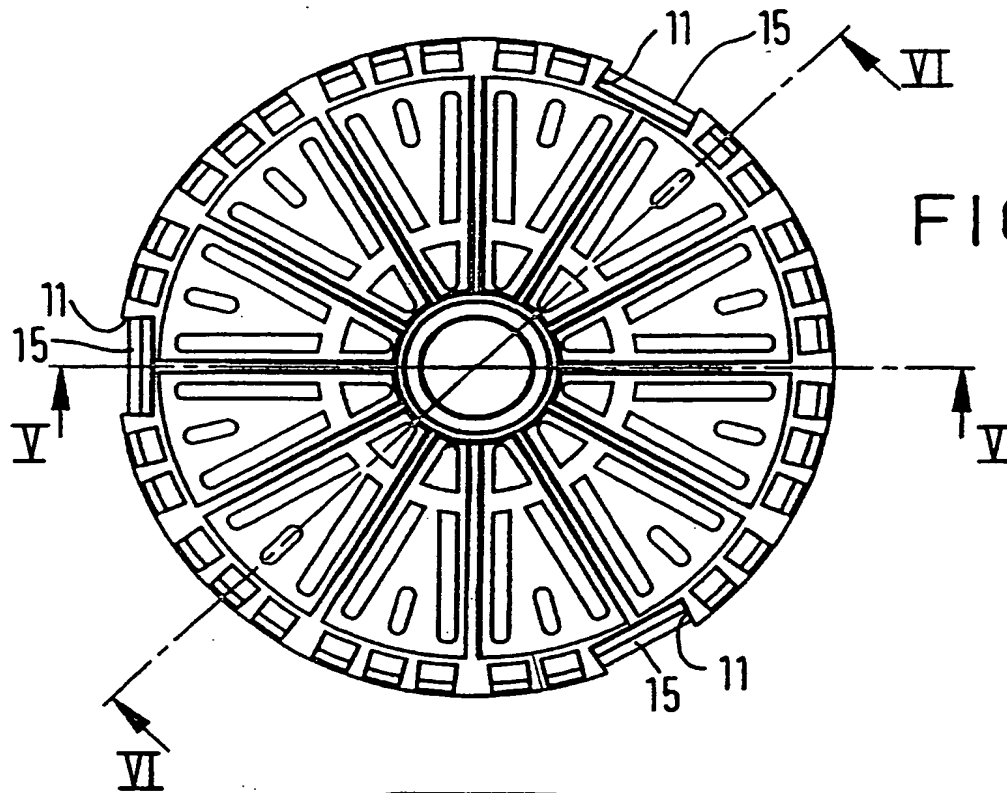


FIG. 4.

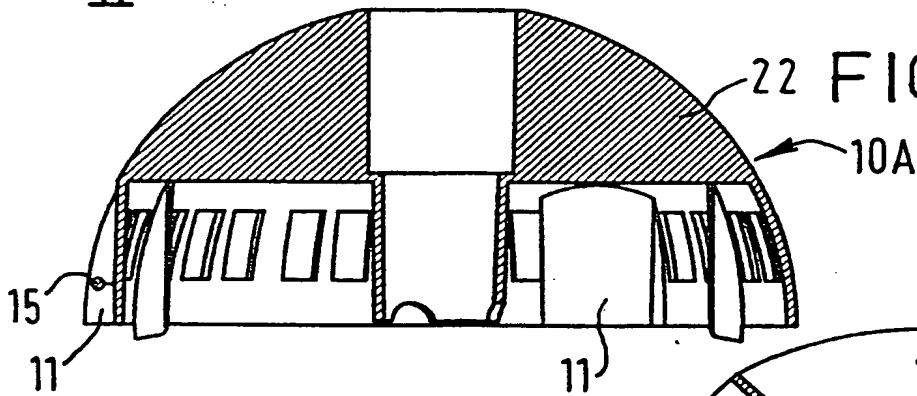


FIG. 5.

FIG. 6.

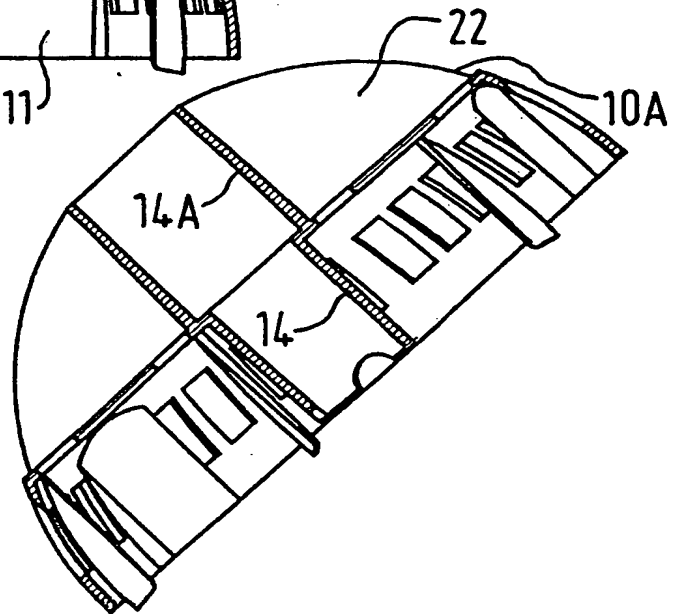
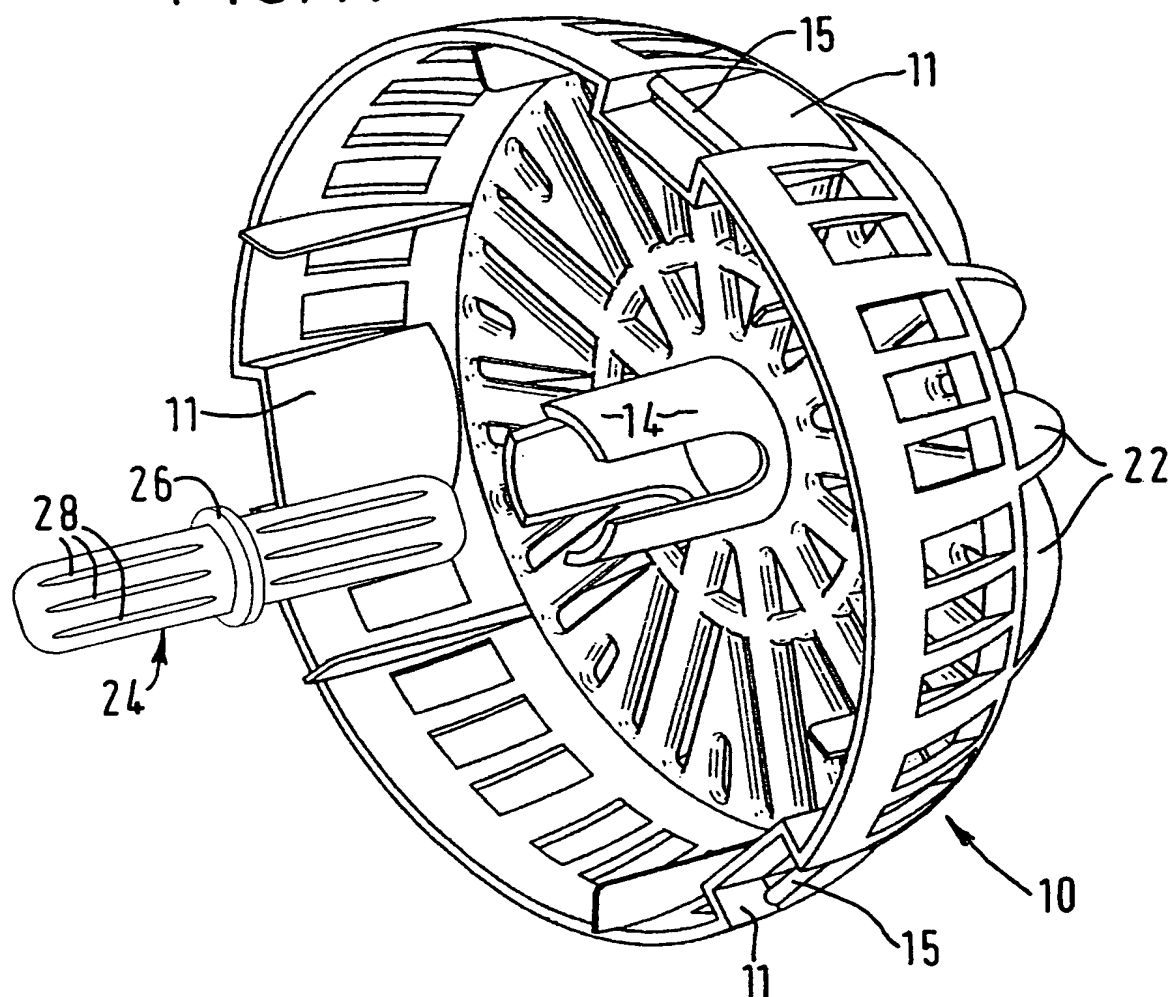


FIG. 7.



INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB 00/01989

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A47L4/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A47L D06F B08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | DE 196 46 340 A (S. KRIEG ET AL.) 14 May 1998 (1998-05-14) ---- | |
| A | EP 0 331 542 A (THE PROCTER & GAMBLE COMPANY) 6 September 1989 (1989-09-06) ---- | |
| A | DE 88 01 528 U (ROBERT FINKE KG) 17 March 1988 (1988-03-17) ----- | |

☐

Further documents are listed in the continuation of box C.

☒

Patent family members are listed in annex.

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Date of the actual completion of the international search

28 September 2000

Date of mailing of the international search report

06/10/2000

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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